

FIG. 1

atgcagccgcggcgggctcgacgcagcagagggcgacgcgagatggcggcagcttcagcggcggcgatctcaggagc  
tggtcgtgtcggctaagcaagattggagctactcgtcgtccacctccagctcgcgtaaggggtggctgtgcgactgcggcc  
atttgggatggaacagcgggagcaagtgatccccctgtgtgcggggcatggacagctgctctctagagattgctaactg  
gaggaaccaccaggagactctcaaataccagtttgatgccttctatggggagaggagtactcagcaggacatctatgcagg  
ttcagtgcagcccatcctaaggcacttgctggaaggcgagaatgccagtgtgcttgccctatggaccacaggagctggga  
agacgcacacaatgctgggcagcccagagcaacctgggggtgatccgcgggctctcatggacctcctgcagctcacaag  
ggaggaggggtgccgagggccggccatggggccctttctgtcaccatgtcttacctagagatctaccaggagaaggtattag  
acctcctggaccctgcttcgggagacctggtaatccgagaagactgccgggggaatatcctgattccgggtctctcccaga  
agcccatcagtagctttgctgattttgagcggcacttcctgccagccagtcgaaatcggactgtaggagccacccgggtcaa  
ccagcgctcctcccgagtcagctgtgtgctcctggtaagggtggaccagcgggaacgtttggccccatttcgccagcgag  
agggaaaactctacctgattgacttggtgggtcagaggacaaccggcgcacaggcaacaaggccttcggctaaaaga  
gagtggagccatcaacacctccctgtttgtcctgggcaaagtggtagatgcgtgaatcagggcctccctcgtgtaccttacc  
gggacagcaagctcactcgcctattgcaggactctctgggtgggtcagcccacagtatccttattgccaacattgcccctga  
gagacgcttctacctagacacagctcctccgactcaacttgctgccaggtccaaggaggtgatcaattga

(SEQ ID NO:1)

**FIG. 2**

maaggstqrrremaaaaisgagrcrlskigatrppparvrvavrlpfvdgtagasdppcvrgmdscsleianw  
mhqetlkyqdfdygerstqqdiyagsvqpilrhlegqnasvlaygptgagkthtmlgspeqpgvipralmdllqltre  
egaegrpwalsvtmsyleiyqekvldlldpasgdlviredcrgnilipglsqkpissfadferhflpasnrvtgatrlnqrs  
srshavllvkvdqrerlapfrqregklylidlagednrrtgnglrlkesgaintslfvlgkvvdalnqglprvpyrdskl  
rllqdslggsahsilianiaperrfyldtvsalnfaarskevin\*

(SEQ ID NO:2)

FIG. 3

atgcagccgcgggcggtcgacgcagcagaggcgacgcgagatggcggcagcttcagcggcgcgatctcaggagc  
tggtcgctgtcggctaagcaagattggagctactcgtcgtccacctccagctcgcgtaagggtggctgtgcgactcggcc  
atttggatggaacagcgggagcaagtgatccccctgtgtcggggcatggacagctgctctctagagattgctaactg  
gaggaaccaccaggagactctcaaataccagtttgatgccttctatggggagaggagtactcagcaggacatctatgcagg  
ttcagtgcagcccatcctaaggcacttgctggaaggcgagaatgccagtgcttgctatggaccacaggagctggga  
agacgcacacaatgctgggcagcccagagcaacctggggtgatcccggggctctcatggacctctgcagctcacaag  
ggaggagggtgccgagggcgccatgggccccttctgtcaccatgtcttacctagagatctaccaggagaaggtattag  
acctctggacctgcttcgggagacctggtaatccgagaagactgccgggggaatatcctgattccgggtctctccaga  
agcccatcagtagctttgctgatttgagcggcacttctgccagccagtcgaaatcggaclglaggagccacccggctcaa  
ccagcgctcctcccgagtcagtgctgtcctggtaagggtggaccagcgggaacgttggccccatttcgccagcgag  
agggaaaactctacctgattgactggctgggtcagaggacaaccggcgcacaggcaacaagggccttcggctaaaaga  
gagtgaggccatcaacacctccctgtttgtcctgggcaaaagtggtagatgcgctgaatcagggcctccctcgtgtaccttacc  
gggacagcaagctcactcgcctattgcaggactctctgggtggctcagcccacagtatccttattgccaacattgccctga  
gagacgcttctacctagacacagtctccgcactcaactttgctgccaggtccaaggaggtgatcaatcggcctttaccaatg  
agagcctgcagcctcatgccttgggacctgttaagctgtctcagaaagaattgcttgggtccaccagaggcaagagagccc  
gaggccctgaggaagaggagattgggagccctgagcccatggcagctccagcctctgcctcccagaaactcagccccct  
acagaagctaagcagcatggaccggccatgctggagcgctcctcagcttgaccgtctgcttgcctcccaggggagc  
cagggggccccctgttgagtaccccaaagcgagagcggatgggtgctaataagacagtagaagagaaggacctagag  
attgagaggcttaagacgaagcaaaaagaactggaggccaagatgttggcccagaaggctgagggaaaaggagaaccat  
tgtcccacaatgtga

(SEQ ID NO:3)

FIG. 4

m p a a g g s t q r r e m a a a s a a i s g a g r c r l s k i g a t r p p p a r v r v a v r l r p f v d g t a g a s d p p c v r g m d s c s l e i a n  
w m h q e t l k y q f d a f y g e r s t q q d i y a g s v q p i l r h l e g q n a s v l a y g p t g a g k t h t m l g s p e q p g v i p r a l m d l l q l t  
r e e g a e g r p w a l s v t m s y l e i y q e k v l d l d p a s g d l v i r e d c r g n i l p g l s q k p i s s f a d f e r h f l p a s m r t v g a t r l n q  
r s s r s h a v l l v k v d q r e r l a p f r q r e g k l y l i d l a g s e d n r r t g n k g l r l k e s g a i n t s l f v l g k v v d a l n q g l p r v p y r d s k  
l t r l l q d s l g g s a h s i l i a n i a p e r r f y l d t v s a l n f a a r s k e v i n r p f n e s l q p h a l g p v k l s q k e l l g p p e a k r a r g p e e e  
e i g s p e p m a a p a s a s q k l s p l q k l s s m d p a m l e r l l s l d r l l a s q g s q g a p l l s t p k r e m v l m k t v e e k d l e i e r l k t k  
q k e l e a k m l a q k a e e k e n h c p t m \*

(SEQ ID NO:4)

FIG. 5

Atgggtcgctgtcggctaagcaagattggagctactcgtcgtccacctccagctcgcgtaaggggtggctgtgcgactgcg  
gccatttgggatggaacagcgggagcaagtgatccccctgtgtgcggggcatggacagctgctctctagagattgctaa  
ctggaggaaccaccaggagactctcaaataccagtttgatgccttctatggggagaggagtactcagcaggacatctatgc  
aggttcagtgcagcccatcctaaggcacttgctggaagggcagaatgccagtgtgcttgccctatggaccacaggagctg  
ggaagacgcacacaatgctgggcagcccagagcaacctgggggatcccgcgggctctcatggacctcctgcagctcac  
aaggaggagggtgccgagggccggccatgggccctttctgtcaccatgtcttacctagagatctaccaggagaaggtat  
tagacctcctggacctgcttcgggagacctggtaatccgagaagactgccgggggaatatcctgattccgggtctctccc  
agaagcccatcagtagctttgctgattttgagcggcacttctgccagccagtcgaaatcggactgtaggagccacccggc  
tcaaccagcgtcctcccgcagtcattgtgtgctcctggtaaggtggaccagcgggaacgtttggccccallcgcagc  
gagagggaaaactctacctgattgacttggctgggtcagaggacaaccggcgcacaggcaacaagggccttcggctaaa  
agagagtggagccatcaacacctccctgtttgtcctgggcaaagtggtagatgcgctgaatcagggcctccctcgtgtacct  
tatcgggacagcaagctcactcgcctattgcaggactctctgggtggctcagcccacagtatccttattgccaacattgcccc  
tgagagacgcttctacctagacacagtctccgcactcaactttgctgccaggtccaaggaggtgatcaattga

(SEQ ID NO:5)

**FIG. 6**

m g r c r l s k i g a t r p p p a r v r v a v r l r p f v d g t a g a s d p p c v r g m d s c s l e i a n w m h q e t l k y q f d a f y g e r s t q q d i  
y a g s v q p i l r h l l e g q n a s v l a y g p t g a g k t h t m l g s p e q p g v i p r a l m d l l q l t r e e g a e g r p w a l s v t m s y l e i y q e  
k v l d l l d p a s g d l v i r e d c r g n i l p g l s q k p i s s f a d f e r h f l p a s m r t v g a t r l n q r s s r s h a v l l v k v d q r e r l a p f r q e  
g k l y l i d l a g s e d n r r t g n k g l r l k e s g a i n t s l f v l g k v v d a l n q g l p r v p y r d s k l t r l l q d s l g g s a h s i l i a n i a p e r r f  
y l d t v s a l n f a a r s k e v i n \*

(SEQ ID NO:6)

FIG. 7

atgggtcgctgtcggctaagcaagattggagctactcgtcgtccacctccagctcgcgtaagggtggctgtgcgactgcgg  
ccatttggatggaacagcgggagcaagtgatccccctgtgtgcggggcatggacagctgctctctagagattgctaac  
tggaggaaccaccaggagactctcaaataccagtttgatgccttctatggggagaggagtactcagcaggacatctatgca  
ggttcagtgcagcccatcctaaggcacttgctggaagggcagaatgccagtgtgcttgccctatggaccacaggagctgg  
gaagacgcacacaatgctgggcagcccagagcaacctgggggtgatcccggggctctcatggacctctgcagctcaca  
agggaggagggtgccgaggccggccatgggccccttctgtcaccatgtcttacctagagatctaccaggagaaggtatt  
agacctctggacctgcttcgggagacctggtaatccgagaagactgccgggggaatatcctgattccgggtctctccca  
gaagcccatcagtagctttgtgattttgagcggcacttctgccagccagtcgaaatcgactgtaggagccacccggct  
caaccagcgtctctcccgcagtcatgtgtgctcctggtaagggtggaccagcgggaacgtttggccccatttcgccagcg  
agagggaaaactctacctgattgacttggctgggtcagaggacaaccggcgcacaggcaacaagggccttcggctaaaa  
gagagtggagccatcaacacctccctgtttgtcctgggcaaagtggtagatgcgctgaatcagggcctccctcgtgtacctt  
atcgggacagcaagctcactcgcctattgcaggactctctgggtggctcagcccacagtatccttattgccaacattgccct  
gagagacgcttctacctagacacagtctccgcactcaactttgctgccaggtccaaggagggtgatcaatcggcctttacca  
atgagagcctgcagcctcatgccttgggacctgttaagctgtctcagaaagaattgcttggccaccagaggcaaagagag  
cccaggccctgaggaagaggagattgggagccctgagcccatggcagctccagcctctgcctcccagaaactcagcc  
ccctacagaagctaagcagcatggacccggccatgctggagcgcctcctcagcttggaccgtctgcttgcctcccagggg  
agccagggggcccctctgttgagtaccccaaagcgagagcggatggtgctaataagacagtagaagagaaggaccta  
gagattgagaggcttaagacgaagcaaaaagaactggaggccaagatgttgcccagaaggctgaggaaaaggagaa  
ccattgtcccacaatgtga

(SEQ ID NO:7)

**FIG. 8**

m grcrlskigatrppparvrvavrlpfvdgtagasdppcvrgmdscsleianwmhgetlkyqfdafygerstqqdi  
yagsvpilrhlegqnasvlaygptgagkthtmlgspeqpgvipralmdllqltreegaegrpwalsvtmsyleiyqe  
kvldlldpasgdlviredcrgnilipglsqkpissfadferhflpasmrtvgatrlnqrssrshavllvkvdqrerlapfrqre  
gklylidlagsednrrtgnkgrlkesgaintslfvlgkvvdalnqglprvpyrdskltrllqdslggsahsilianiaperrf  
yldtvsalnfaarskevinrpfneslqphalgpvklsgkellgppeakrargpeeeeigspemaapasasqklsplqk  
lssmdpamlerllsldrllasqgsqgapllstpkrrmvlmktveekdleierlktkqkeakmlaqkaeekenhcpt  
m\*

(SEQ ID NO:8)